

STATEMENT OF BASIS (AI No. 17027)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0100811 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Pilgrim's Pride Corporation
Farmerville Processing Plant
P.O. Box 726
Farmerville, LA 71242

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Kelli Hamilton

DATE PREPARED: April 30, 2009

1. PERMIT STATUS

A. Reason For Permit Action:

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

B. LPDES permit - LPDES permit effective date: January 1, 2004
LPDES permit expiration date: December 31, 2008

C. Date Application Received: October 20, 2008. Additional information received via email on April 28, 2009.

2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY - poultry processing and rendering facility

This is an existing poultry processor. The poultry processing includes: kill, scald, pick, eviscerate, chill, cutup, debone and package fresh poultry products. The cooking operation includes: grind, blend, batter, bread, marinate, fry, bake, freeze and package poultry products. The rendering operation includes: screen, grind, blend, cook, and ship poultry by-products for animal feed ingredients.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: II
3. Wastewater Type: II
4. SIC code: 2015 and 2077

C. LOCATION - 6648 Highway 15 North in Farmerville, Union Parish
Latitude 32°49'59", Longitude 92°25'39"

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3. OUTFALL INFORMATION

Outfall 001

Discharge Type: process wastewater and stormwater runoff
 Treatment: screening, gravity separation, dissolved air flotation, anaerobic lagoon, activated sludge treatment, clarification, post aeration, UV disinfection, constructed wetlands
 Location: at the point of discharge from the constructed wetlands
 Flow: 2.3 MGD
 Discharge Route: unnamed ditch, thence into Hunnicut Creek, thence into Fourmile Creek, thence into D'Arbonne Lake

Outfall 002

Discharge Type: process wastewater and stormwater runoff
 Treatment: screening, gravity separation, dissolved air flotation, anaerobic lagoon, activated sludge treatment, clarification, post aeration, UV disinfection
 Location: at the point of discharge from the Schreiber System
 Flow: 2.3 MGD
 Discharge Route: unnamed ditch, thence into Hunnicut Creek, thence into Fourmile Creek, thence into D'Arbonne Lake

4. RECEIVING WATERS

STREAM - unnamed ditch, thence into Hunnicut Creek, thence into Fourmile Creek, thence into D'Arbonne Lake

BASIN AND SEGMENT - Ouachita River Basin, Segment 080604

DESIGNATED USES - a. primary contact recreation
 b. secondary contact recreation
 c. propagation of fish and wildlife

5. TMDL WATERBODIES

Subsegment 080604, Bayou D'Arbonne Lake, is not listed on LDEQ's Final 2006 303(d) List as impaired, and to date no TMDL's have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

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6. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale below.

Changes from previous permit: The monitoring frequency for fecal coliform has been increased to 1/week. Guideline Oil and Grease Limits have been added. Guideline Total Nitrogen Limits have been added. Stormwater Pollution Prevention Plan requirements have been added to Part II*.

*Upon the effective date of the final permit, this office will cancel in its entirety LAR05N521 issued on May 25, 2006.

7. COMPLIANCE HISTORY/COMMENTS

A. Compliance History

No records of recent compliance actions were found.

B. DMR Review/Excursions - The DMRs were reviewed for the period of March 2007 through March 2009.

<u>DATE</u>	<u>PARAMETER</u>	<u>OUTFALL</u>	<u>REPORTED VALUE</u>		<u>PERMIT LIMITS</u>	
			<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>
3/07	NH3-N	001	98.06 8.57	345.94 24.4	77 4	153 8
3/07	CBOD	001	263.38 23.02	737.27 58.7	192 10	288 15
5/07	NH3-N	001	76.37 5.12	375.5 22.9	77 4	153 8
5/07	CBOD	001	269.04 19.85	1190.46 70.7	192 10	288 15
5/07	TSS	001	197.29 13.23	560.72 33.9	288 15	441 23
2/08	Fecal Coliform	001	50	500	200	400
7/08	TSS	001	9.89 15.88	225.43 30	288 15	441 23
9/08	Fecal Coliform	001	63.2	800	200	400

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DATE	PARAMETER	OUTFALL	REPORTED VALUE		PERMIT LIMITS	
			MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM
10/08	Fecal Coliform	001	92.2	850	200	400
12/08	Fecal Coliform	001	79.5	1000	200	400
1/09	Fecal Coliform	001	100	2000	200	400
2/09	TSS	001	102.15 10.61	270.18 26	288 15	441 23
2/09	CBOD	001	129.62 13.46	219.26 21	192 10	288 15

8. EXISTING EFFLUENT LIMITS

Pollutant	Limitation		Monitoring Requirements	
	Mo. Avg: Daily Max (lb/day)	(mg/l)	Measurement Frequency	Sample Type
Flow	Report: Report	----	1/week	Estimate
CBOD ₅	192:288	10:15	1/week	24-hr composite
TSS	288:441	15:23	1/week	24-hr composite
NH ₃ -N	77:153	4:8	1/week	24-hr composite
Dissolved Oxygen	----	5.0 (min)	1/week	Grab
Fecal Coliform		200:400	1/month	Grab
pH (s.u.)		6.0:9.0 (min: max)	1/week	Grab
Chronic Biomonitoring	Report: Report		1/3 months	24-hr composite

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9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 080604 of the Ouachita River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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13. STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water shall not be required to obtain and LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 2015 are considered to have storm water discharges associated with industrial activity.

For first time permit issuance, the SWP3 shall be prepared, implemented, and maintained within six (6) months of the effective date of the final permit. For renewal permit issuance, the SWP3 shall be reviewed and updated, if necessary, within six (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in storm water discharges associated with industrial activity at the facility (see Part II of the Draft Permit).

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Rationale for Pilgrim's Pride Corporation

1. Outfalls 001 and 002 process wastewater and stormwater runoff (estimated flow is 2.3 MGD)

<u>Pollutant</u>	<u>Limitation</u> Mo.Avg:Daily Max (lb/day)		<u>Reference</u>
Flow	Report:Report		LAC 33:IX.2707.I.1.B
CBOD ₅	192:288	10:15	previous permit
TSS	288:441	15:23	previous permit
NH ₃ -N	77:153	4:8	previous permit;40 CFR 432.112
Oil&Grease	---:---	8:14	40 CFR 432.112
Dissolved Oxygen	---:---	5.0 (min)	previous permit
Total Nitrogen	---:---	103:147	40 CFR 432.113
Fecal Coliform		200:400	previous permit;40 CFR 432.112
pH (s.u.)		6.0:9.0 (min:max)	previous permit;40 CFR 432.3
Chronic Biomonitoring		See below	LAC 33:IX.1121.B.3

Treatment: screening, gravity separation, dissolved air flotation, anaerobic lagoon, activated sludge treatment, clarification, post aeration, UV disinfection, constructed wetlands (Outfall 001)

Monitoring Frequency: 1/week for all parameters. The monitoring frequency for fecal coliform has been increased to 1/week due to violations of the previous permit.

Limits Justification:

Pilgrim's Pride Corporation, Farmerville Processing Plant is subject to Best Practicable Control Technology Currently Available (BPT) and Best Available Technology Economically Achievable (BAT) effluent limitation guidelines listed below:

<u>Manufacturing Operation</u>	<u>Guideline</u>
Meat and Poultry Products	432, Subpart K
Point Source Category	

LDEQ's implementing guidance, in consideration of anti-backsliding provisions of the Clean Water Act, specifies that if a pollutant is covered under both the existing permit and the Poultry First Processing ELGs, the more stringent of the two applies.

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CBOD - the monthly average (16 mg/l) and daily maximum (26 mg/l) concentration limits from the Poultry First Processing effluent guidelines are less stringent than the site-specific BPJ monthly average and daily maximum CBOD limits established in the previous LPDES permit. Therefore, concentration limits for CBOD of 10 mg/l monthly average and 15 mg/L daily maximum are retained from the previous state permit. Loading Limits are not established in the Poultry First Processing effluent guidelines, therefore these limits are also retained from the previous state permit.

TSS - the monthly average (20 mg/l) and daily maximum (30 mg/l) concentration limits from the Poultry First Processing effluent guidelines are less stringent than the site-specific BPJ monthly average and daily maximum limits established in the previous LPDES permit. Therefore, concentration limits for TSS of 15 mg/l monthly average and 23 mg/L daily maximum are retained from the previous state permit. Loading Limits are not established in the Poultry First Processing effluent guidelines, therefore these limits are also retained from the previous state permit.

NH3-N - the monthly average and daily maximum concentration limits from the Poultry First Processing effluent guidelines are the same as the previous state permit. Therefore, these limits are retained. Loading Limits are not established in the Poultry First Processing effluent guidelines, therefore these limits are also retained from the previous state permit.

Oil&Grease - the previous state permit does not have limits. Therefore, the monthly average and daily maximum concentration limits from the Poultry First Processing effluent guidelines are being established in this permit.

Dissolved Oxygen - limits are not established in the Poultry First Processing effluent guidelines, therefore these limits are retained from the previous state permit.

Total Nitrogen - the previous state permit does not have limits. Therefore, the monthly average and daily maximum concentration limits from the Poultry First Processing effluent guidelines are being established in this permit.

Fecal Coliform - the maximum of 400 per mL limit from the Poultry First Processing effluent guidelines is the same as the previous state permit. Therefore, this limit is retained. The 200 per mL limit is not established in the Poultry First Processing effluent guidelines, therefore this limit is retained from the previous state permit.

pH - limits are established in the 40 CFR Part 432 - Meat and Poultry Products Point Source Category, and are also retained from the previous state permit.

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Biomonitoring Requirements

It has been determined that there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream. The State of Louisiana has established a narrative criteria which states, "toxic substances shall not be present in quantities that alone or in combination will be toxic to plant or animal life." The Office of Environmental Services requires the use of the most recent EPA biomonitoring protocols.

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. The biomonitoring procedures stipulated as a condition of this permit for Outfall 001 are as follows:

TOXICITY TESTS

FREQUENCY

Chronic static renewal 7-day
survival and reproduction test
using Ceriodaphnia dubia
[Method 1002.0]

1/3 months

Chronic static renewal 7-day
larval survival and growth test
using fathead minnow (Pimephales
promelas) [Method 1000.0]

1/3 months

Toxicity tests shall be performed in accordance with protocols described in the latest revision of the "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms." The stipulated test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge in accordance with regulations promulgated at LAC 33:IX.2715.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the test method publication mentioned in the previous paragraph. The permittee shall submit a copy of the first full report to the Office of Environmental Compliance. The full report and subsequent reports are to be retained for three (3) years following the provisions of Part III.C.3 of this permit. The permit requires the submission of certain toxicity testing information as an attachment to the Discharge Monitoring Report.

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This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.3105. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

Dilution Series

The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 31%, 41%, 55%, 73%, and 97%. The low-flow effluent concentration (critical dilution) is defined as 97% effluent.

* Existing permits for similar outfalls
BAT Best Available Technology Economically Achievable
BPJ Best Professional Judgement
BCT Best Conventional Pollutant Control Technology

su Standard Units

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.